



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,796	01/30/2001	Jouet Pierrick	PF980052	4798

7590 04/13/2004  
Joseph S Tripoli  
Thomson Multimedia Licensing Inc  
CN 5312  
Princeton, NJ 08543-0028

EXAMINER

WILLIAMS, LAWRENCE B

ART UNIT	PAPER NUMBER
----------	--------------

2634

DATE MAILED: 04/13/2004

4

Please find below and/or attached an Office communication concerning this application or proceeding.

56

# Office Action Summary

Application No.

09/744,796

Applicant(s)

PIERRICK, JOUET

Examiner

Lawrence B Williams

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 January 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Drawings*

1. This application has been filed with informal drawings, which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

2. The drawings are objected to because:

a.) Applicant makes reference to “the signal H IN” on page 6 of the specification in lines 9 and 14. Examiner is unable to find this “H IN” in any accompanying figures.

a.) In Fig. 1, 2, examiner suggests applicant label elements 2, 3, 4, 6, 7, 8, 9, 10 as referenced in specification.

It is office policy to request from applicants that submitted figures contain both text and numerical labels to allow individuals viewing each figure to be able to determine the designation of each element in the figure without having to go into the specifications.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show FEN1 AND FEN2 in Fig. 1 as described on page 6 of the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply

Art Unit: 2634

to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Specification*

4. The abstract of the disclosure is objected to because form and legal phraseology "said" in line 3. Correction is required. See MPEP § 608.01(b).

5. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "**means**" and "**said**," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

6. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Objections*

7. Claim 7 is objected to because of the following informalities: Claim 7 recites the limitations "the signals of digital type, the various zones, the PLL" in lines 2, 3, and 6, respectively. There is insufficient antecedent basis for these limitations in the claim. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

9. Claims 7 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The device claim of claim 7 referring back to method claim 1, indicates that the device is suitable for implementation of the method as disclosed in claim 1. The claim should reference all the technical features essential to the definition of the invention. The claim as it stands does not. The device defined in the description (specification and Fig. 1) not only includes the programmable electronic circuit, but also a PLL, a circuit for creating analysis zones comprising delay circuits, logic gates, etc...along with other components linking the circuits. All essential features should be described in this device claim.

Accordingly, the claims 7 and 8 have not been further treated on the merits.

***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 2634

11. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Laflin (W/O 91/19358).

(1) With regard to claim 1, Laflin discloses in Figs. 3, 5, and 6 a method of clock recovery during the sampling of signals of digital type, the sampling clock being generated from a phase-lock loop or PLL (102) which multiplies a given frequency by an integer number or "division rank", the method comprising a step of comparing the relative position of the signals of digital type with respect to the sampling clock in such a way as to determine whether a chosen type of transitions of the sampling clock is in phase with the same type of transitions of signals of digital type: by formulating, over a period of the sampling clock, several zones (ACC1-2-ACC4-1), a zone corresponding to the chosen type of transitions, by analyzing the transitions (150) of the signals of digital type with respect to the rising and falling transitions of the sampling clock, by aggregating in the corresponding zone the analysis results, and by determining, as a function of the aggregates, whether or not a modification of the frequency and/or of the phase of the sampling clock needs to be carried out, wherein the results of the aggregations are utilized as follows: a) all the information is in the zone corresponding to the chosen type of transitions, the signals of digital type are in phase and in frequency with the sampling clock; b) the information is in two non-adjacent zones, there is a frequency error between the signals of digital type and the sampling clock; c) the information is in two adjacent zones or in a single zone different from the zone corresponding to the chosen type of transitions, there is a phase error between the signals of digital type and the sampling clock (pg. 6, line 14- pg. 7, line 8).

(2) With regard to claim 2, Laflin also discloses wherein the analysis step is preceded by a step of shaping the signals of digital type into logic signals (pg. 10, lines 29-35).

(3) With regard to claim 3, Laflin also discloses wherein the chosen type of transition is the falling transition (pg. 6, lines 23-25).

(4) With regard to claim 4, Laflin also discloses wherein four zones are formulated, with one zone corresponding to a rising transition, one zone corresponding to a falling transition, one zone corresponding to a top porch and one zone corresponding to a bottom porch (Fig. 3, pg. 6, lines 18-19).

(5) With regard to claim 5, Laflin et al. also discloses wherein the analysis is carried out with the aid of two windows respectively corresponding to the rising and falling transitions of the sampling clock (pg. 6, lines 23-25; pg. 10, lines 3-12).

(6) With regard to claim 6, Laflin also discloses wherein the relative values of the information in two different zones or the value of the information in a zone different from the zone corresponding to the chosen type of transitions determine the sense and the amplitude of the phase correction or frequency correction to be applied to the sampling clock (pg. 18, lines 1-17).

### ***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lawrence B Williams whose telephone number is 703-305-6969. The examiner can normally be reached on Monday-Friday (8:00-5:00).

Art Unit: 2634

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703-305-4714. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lawrence B. Williams

lbw  
March 26, 2004



**STEPHEN CHIN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**